



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

ON THE
PRESENT CONDITION
OF THE
MEDICAL PROFESSION IN SYRIA.

BY
REV. C. V. A. VAN DYCK, M. D.,
MISSIONARY OF THE AMERICAN BOARD IN SYRIA.

ON THE PRESENT CONDITION
OF THE
MEDICAL PROFESSION IN SYRIA.

THE East has been called the cradle of medical science. Under the patronage and protection of the Khalifehs of Baghdad and Egypt, various departments of knowledge were pursued with eagerness, and many arts were carried to a good degree of perfection; but particular precedence was ever given to the science of medicine, and its votaries often received the highest honors and emoluments. This high respect paid to the healing art must have arisen not only from the nature of its primary object, the relief of the various ills to which flesh is heir, but also from its intrinsic difficulties, and from the fact of its involving, to a great degree, an acquaintance with the whole circle of the sciences. Physicians were generally at the same time naturalists, metaphysicians, astrologers and alchemists, a fact which accounts for their being called حكام *Hukema*, wise men, their proper

designation being أطباء *Tibba*, healers. Both titles continue in use, although the present "incumbents" deserve neither the one, nor the other.

The names of Avicenna, Abulcasis, Avenzoar, Averroes, and Rhazes, are familiar to every medical man. The works of the latter are very rare, and are not so much valued by the present Arab physicians as those of Avicenna, whose elaborate treatises upon pathology, materia medica, theory and practice, and natural science, form the basis of oriental practice at the present day. The work of Razi in which

he notices some of the exanthemata, and prescribes treatment much the same as that now employed by our own practitioners, is thrown aside ; and the most decided preference is given to the treatment based upon the theory of morbid humors as advanced by Avicenna, who drew most of his information from the works of Galen, Dioscorides, Aristotle, Hippocrates, and other ancient Greek authors.

Much has been said about Arab science in general, and high praises have been bestowed upon Arab philosophers ; but I imagine that a full development of facts would show, that by far the greater part of Arab science has been derived from Greek sources. The questions how, and when, and by whom, Greek literature was introduced into the Arabic language, would afford abundant matter for research to the Arabic scholar. Something may be learned on this subject from the following brief accounts of a few eminent Arab physicians, drawn mostly from Ibn Khallikan's "Memoirs of the eminent men of Islamism."*

1. Abu Hashim Ibn Yezid Ibn Mu'aweh Ibn Abi Sofyan El-Amawi. He was one of the most learned men of the Koreish, particularly in medicine and alchemy, subjects upon which he wrote several tracts. He obtained most of his information from a monk called "Merjanus the Greek," and one of his tracts is devoted to an account of his transactions with this monk, mingled with snatches of poetry, some of which are in praise of his teacher. His grandfather Abu Sofyan was the conductor of the caravan of the Koreish which caused the battle of Bedr. He died in the 85th year of the Hegira.

2. Abu 'Abdallah Ja'far Es-Sadik Ibn Mohammed El-Bakir Ibn 'Ali Zein El-'Abidin Ibn 'Ali Ibn Abi Talib, who was born in the 80th year of the Hegira, and was surnamed Es-Sadik in consequence of the uprightness of his character. He wrote a work on alchemy and magic, which was commented upon and enlarged in a work of 2,000 pages by his disciple Abu Musa Jabir Ibn Hayyan Es-Sufi Et-Tartusi. He died in the 148th year of the Hegira, and was buried at Medina, in the sepulchre of his ancestors. His mother was a descendant of Abu Bekr Es-Siddik.

* A manuscript copy of this work was offered for sale at Aleppo a few years since, for sixty dollars, and was considered cheap.

3. Abu Zeid Hunain Ibn Ishak El-'Abadi, who was one of the most distinguished physicians of his day, and familiar with the Greek language. He was the principal translator of Greek works into Arabic under the Khalifeh Harun Er-Reshid, who, in connection with his Wezir Ja'far El-Barmaki, made great exertions towards introducing the literature of Greece among the Arabs. His translation of Euclid alone would give him a deserved celebrity. He also wrote several works on medicine. His death occurred in the 260th year of the Hegira.

4. Abu Ya'qub Ishak Ibn Hunain Ibn Ishak El-'Abadi, son of Abu Zeid above mentioned. He was taught medicine and Greek by his father, whom he was in the habit of accompanying in his professional visits. He also made several translations from Greek into Arabic, and, among others, some of selections from Aristotle. His death was caused by a paralytic attack in the 298th or 299th year of the Hegira. The family name 'Abadi is derived from 'Abad El-Hira, a title given to several families, originally Christian, who settled in the province of El-Hira, in consequence of their allegiance to the kings of Persia. In the 17th year of the Hegira, Sa'ad Ibn Abi Wakkas destroyed El-Hira, by order of 'Omar Ibn El-Kattab, and built El-Kufa in its stead.

5. Abu-l-Hasan Thabit Ibn Kurra Ibn Zehrun Ibn Marinus Ibn Malajerius El-Harrani, the arithmetician and physician. He was born in the 221st year of the Hegira, at Harran in Mesopotamia, which is said by Jarir Et-Tabari, in his history, to have been built by Harran the father of Lot. He wrote several works on medicine and philosophy, besides correcting and enlarging Euclid as left by Hunain Ibn Ishak El-'Abadi. His son Ibrahim followed in the footsteps of his father, and became one of the eminent men of his time. One of his descendants, Abu-l-Hasan Thabit, also became a noted physician and Greek scholar. He was well versed in the writings of Hippocrates and Galen, and had some reputation as a mathematician.

6. Er-Rais Abu 'Ali El-Husein Ibn 'Abdallah Ibn Sina, familiarly known as Avicenna. His father was originally from Balkh, in the southern part of Grand Bokhara, whence he afterwards removed to Kharmeithen, near Bokhara the capital, where he held the office of a government-agent. The

subject of this notice was born at Kharmeithen, in the month of Šafar, of the 370th year of the Hegira. His parents afterwards removed to Bokhara the capital, and the son commenced his literary career by picking up knowledge from various sources, as he best could. At the age of ten years, he had become familiar with the Koran, had acquired some knowledge of the belles-lettres of the day, and had made a laudable proficiency in casuistry, arithmetic, and algebra. About this time, his father received as a guest a learned man and physician, named Abu 'Abdallah En-Nateli, under whose tuition Abu 'Ali read "*Kitab el-Eisagoge*"* on logic, Euclid, and the *Almagest*,† in which he soon so far surpassed his teacher as to point out many things either unknown to him, or previously unobserved by him. En-Nateli being afterwards called to the prince Khuwarezm Shah Mamun Ibn Moḥammed, Abu 'Ali continued the pursuit of physics, theology, and medicine. As a physician he soon surpassed the best practitioners of his own and former ages, so that, by the time he arrived at the age of sixteen, the learned from all parts sought his acquaintance and instruction. It is said of him that, during this period, he rarely allowed himself the amount of sleep necessary to nature; and, whenever a difficult question presented itself, it was his custom to perform his ablutions, and then proceed to the mosque, and ask assistance from God. The Emir Nuḥ Ibn Naṣr Es-Samani prince of Khorasan being taken ill, Abu 'Ali was called to prescribe for him, and succeeded in effecting a cure. This circumstance attached him to the prince, at whose court he remained, having free access to the library, which is said to have been the most choice collection of the age. Here Abu 'Ali pursued his studies with the utmost assiduity, until he had made his own all that was valuable in the collection of books just mentioned; which being soon after burnt, he remained sole possessor of its treasures of knowledge. It has been hinted that he was himself privy to its destruction, with a view to securing the superiority he had acquired from an acquaintance with its contents.

* The *Εἰσαγωγή* of Porphyry.

† In Arabic *المجسطي*, Gr. *ἡ μεγίστη* i.e. the *Μεγάλη σύνταξις* of Ptolemy.

When Abu 'Ali had arrived at the age of twenty-two, his father died, and, the Samani dynasty falling into decline, he left Bokhara, and went to Kurkanj the capital of Khuwarezm, and entered the service of Khuwarezm Shah 'Ali Ibn Mamun Ibn Mohammed, who gave him a salary adequate to his support. He afterwards remained for a time in the service of the Emir Shems El-Mu'ali Kabus Ibn Weshemkir, prince of Tabaristan; but, upon the breaking out of the revolution by which that prince was overthrown and imprisoned, Abu 'Ali went to Dahistan, where he suffered a severe illness. He then returned to Jurjan* and while there wrote his work entitled "Kitab el-Awsat El-Jurjani." After several removals, he at last became Wezir to Shems ed-Dôlet, prince of Hamadan; but the troops of that prince, becoming enraged against him, plundered his dwelling, seized his person, and demanded of the prince permission to put him to death. To avoid this, he was dismissed from the service, but Shems ed-Dôlet, being soon after seized with a violent fit of colic, recalled Abu 'Ali, apologized for his former conduct, and restored him to the dignity of Wezir. Shems ed-Dôlet soon after died, and was succeeded by his son Taj ed-Dôlet. The latter dismissed Abu 'Ali, who came to Ispahan, where he received many favors from the prince 'Ala ed-Dôlet Ibn Ja'far Ibn Kakweh. During his residence at Ispahan, he was seized with a fit of colic, and treated his own case, making use of enemata as the principal means of relief, using them, it is said, to the number of eighty every day. Dysentery succeeded, by which he was very much reduced. After recovering from this attack, he accompanied 'Ala ed-Dôlet on a journey, and was again seized with colic while on the road. He again resorted to enemata, and ordered his attendant to add to each one-third of a drachm of parsley.† By mistake, or intentionally, five drachms were added, which aggravated the disease. Some of his servants also added opium to his medicines, in order to cause his death, because, having fallen under his displeasure, they feared the consequences, in case

* The Arabic form of the name Kurkanj.

E. E. S.

† The word كرفس *karafs*, or *kurfus*, is used indiscriminately for parsley, celery, and water-cress. See "Avicennæ opera." Romæ: 1593, p. 195.

of his recovery. The disease continued upon him for a considerable time, with occasional relapses and recoveries, until he accompanied Shems ed-Dôlet on a journey from Ispahan to Hamadan. He was again seized with colic on the way, and arrived at Hamadan in a state of complete exhaustion. Despairing of recovery he purified himself, gave alms, freed his Mamelukes, read the Koran through every three days, and died on a Friday during the month of Ramadhan, in the 428th year of the Hegira.

Abu 'Ali is said to have written works, on various subjects, to the number of a hundred, of which I have been able to obtain only his "Canon of Medicine," a tract on logic, one on physics, one on metaphysics, and a medical work in verse, in the composition of which last he has followed the desperate propensity which Arabs seem to have had for putting all their sciences into rhyme. His "Canon of Medicine" was printed at Rome in the year 1593, probably for the use of the medical schools of Europe. The following general outline will convey some idea of the subjects of which he treats.

BOOK I.

Chapter 1. Introduction—Objects of medical science—Elementary bodies—Temperaments—Humors—Anatomy of the bones—Muscles, nerves, arteries, veins—Functions animal and mental.

Chapter 2. Nosology—Physical agents, and changes of the seasons—Etiology—Symptomatology—On the pulse—On the excrementitial secretions, and their value in diagnosis and prognosis.

Chapter 3. On the management and education of children—Their diseases and treatment—Exercise, its necessity and varieties—On shampooing—On the use of hot and cold bathing—On diet and regimen—On fatigue—On old age, and preservation of health at that time of life—Diet and exercise proper for old persons—On maintaining the equilibrium of the system—On the change of habits required by the change of the seasons—On preventives of disease and precautions against it, particularly as regards travelling, by sea or land.

Chapter 4. On the use of evacuants—Emetics—Cathartics—Hyperemesis and hypercatharsis—On enemata—Lin-

iments and embrocations—Douches—Venesection, cupping, leeching—On tumors and opening them—On the actual cautery and means of allaying pain.

BOOK II.

Chapter 1. On the combination of medicines—Classification of remedies—Pharmaceutical preparations—Collection and preservation of medicines.

Chapter 2. Articles of the materia medica described, and their uses pointed out, arranged alphabetically.

BOOK III.

Chapter 1. Diseases of the various organs, beginning with the head, preceded by an anatomical account of each organ as treated of.

BOOK IV.

Chapter 1. On fevers and exanthemata.

Chapter 2. On crises and critical days.

Chapter 3. On phlegmonous and other tumors.

Chapter 4. Wounds—Concussions, contusions—Ulcers—Diseases of the bones.

Chapter 5. Dislocations—Fractures simple and compound.

Chapter 6. On poisons, mineral and vegetable, and their antidotes—Stings of serpents—Hydrophobia.

Chapter 7. On the hair—Causes of baldness—Diseases of the scalp—On grey hairs and the prevention of them—On coloring the hair—On dandruff and scurf—On the complexion, what beautifies and what injures it—Cicatrices—Freckles—On the bohak, and white and black leprosy—Scurvy, itch, and other cutaneous diseases—Excrescences—Chaps—Marasmus—Obesity.

BOOK V.

Chapter 1. Pharmacy—Conserves, electuaries, ointments, etc.

Chapter 2. Tried remedies—Specifics and recipes.

The above, together with a tract on logic, one on physics, and one on metaphysics, form a folio volume of 1036 pages, closely printed in small type.

Others might be added to our list of eminent Arab physicians, but I fear too much has been said already, which is foreign to the proper subject of this paper. Although great praise may justly be given to the Arab nation as the preservers of science, they deserve none as discoverers. Even their claims as the originators of chemistry, so long conceded, have proved unfounded, and the most that can be said in their favor is that they made some improvements in what they derived from extraneous sources; and, by their conquests in the north of Africa and in Spain, became the means of awakening Europe from its lethargy, and of introducing into its seminaries of learning branches of science for which they were themselves indebted to Greece and India.* Few individuals, even of the most learned and enlightened nations of the earth, cultivate science for its own sake. Honor and emolument have ever been the great stimuli to exertion and study; and the Arab race differs not from the rest of mankind, in this respect. As long as such men as Harun Er-Reshid, and his immediate successors, continued to be the patrons of literature, and honored and rewarded its votaries, so long the Arabs continued its pursuit, and no longer. The neglect into which literary accomplishments had fallen, even in the time of El-Hariri, is beautifully hinted at in his forty-third *Maḳameh*. Besides this, Islamism, in itself considered, must be regarded as a desolating superstition. The same principle which led the Khalifeh 'Omar to order the burning of the Alexandrian library, has since then worked the ruin of many a fair structure, and given the death blow to many a worthy enterprise. Improvement among the Osmanli Turks began, when their religion began to lose its hold upon their minds. That the science of medicine, under these pernicious influences, has not altogether shared the fate of its kindred, and been buried deep under the same wave which swept away the writings of astronomers, chemists, naturalists, and historians, must be attributed in part to its nature and object, which give it high respect even among the most barbarous tribes, and in part to those faint remembrances of the past, which dimly shadow forth the celebrity and success of the

* But see Humboldt's *Cosmos*, Sabine's transl., II. pp. 201 and ff.

old Arab physicians. Faith in the power of the medical art is thus maintained, notwithstanding ignorance and want of success on the part of its practitioners; and this faith has been strengthened by the occasional visits of educated European physicians, whose dexterity in operation and skill in managing disease have shown the capability of the science, when rightly understood and applied.

It may at first sight seem inconsistent, that those who believe in irrevocable fate, should place confidence in preventive, or remedial means. The two things are partly reconcilable by falling back upon human ignorance of what may be the fated decree in any particular case; and partly, by a retreat upon the creed itself. If Zeno's slave was fated to steal, he was also fated to be whipped; and so Moḥammed, when some one said: "O prophet of God! inform me respecting charms, and the medicines which I swallow, and the shields which I make use of for protection, whether they prevent any of the orders of God," replied: "These are also by the order of God."*

Small as is the amount of medical knowledge among the Arabs, at the present day, the means of obtaining it are still more limited. Medical works, like all others, exist only in manuscript; and there are few persons who have the means of gathering around them more than two or three of the minor ones. Besides this, the West has plundered the East of a large part of its literature. Many valuable works which can not now be found at all among the Arabs, are preserved in the libraries of Europe. I have never seen or heard of a manuscript copy of Avicenna's works, and copies of the edition printed at Rome are rare and costly. A later work on *materia medica* and therapeutics by Dawud El-Baṣir El-Antaki, is more common, and much esteemed; though it is little more extensive than Avicenna's work in those departments, and is founded upon it. Ibn Beitar's botanical dictionary is scarcely to be found. Minor works, apparently borrowed in part from it, are quite common, such as "The book of what the physician may not be ignorant of" and a *Materia Medica*, animal, mineral, and vegetable,

* For a full account of this matter, see Lane's Translation of the Thousand and one Nights. Chapter I. note 5.

by Mesih Ibn Yehya of Damascus. Translations from Hippocrates, Aristotle, Galen, Paracelsus, and others, are comparatively abundant, and the possession of any one of them is sufficient to give to a man the title of Doctor.

The efforts of Mohammed 'Ali in Egypt have secured the establishment of medical institutions and hospitals, where numbers of Egyptian youth are instructed according to the principles of the French school, and European works upon the various departments of medicine, and other sciences, have been translated into Arabic and printed. It is, however, an objection to these works, that, in the process of translation, sufficient care has not been taken to search out the proper Arabic technical terms, particularly as regards the names of medicines. It is true that, in consequence of the advancement of science, many new words must necessarily be introduced into the language. But, in the works alluded to, new words have been coined for things which have pure Arabic names; and, where this is not the case, the terms are not only not rendered into Arabic, but are so much changed as not to be recognizable even to one familiar with the languages from which they are drawn, so that they remain like the olive tree mentioned in the Koran, neither oriental nor occidental.* Nevertheless, it must be acknowledged that the profession in Egypt is far in advance of what it is in any other part of the East. A very few individuals in Syria have profited by the Egyptian books, and by associating with the physicians of the army, during the continuance of the Mohammed 'Ali's dominion in that province. The old Emir Beshir sent several promising Syrian youth to be educated in the Egyptian schools and hospitals, some of whom are still pursuing their studies there. Those who have returned have not fulfilled the expectations formed with regard to them, except in the single instance of a young man now practising in Beirut.

Though, as has been stated, the means of acquiring an adequate knowledge of modern medical science are altogether wanting in Syria, and the ancient authors are accessible to few, yet this does not prevent any individual, high or low, rich or poor, learned or unlearned, from setting up as a practitioner at any moment. Almost innumerable are the instan-

* Súrah xxiv. v. 35.

ces in which poor tradesmen, mechanics, and farmers, suddenly conceiving the idea of practicing medicine, leave their several employments, buy a lancet, or grind an old knife-blade into the shape of one, and give themselves out as Doctors; and strange to say, all these individuals find more or less encouragement. Incapacity to read and write forms no impediment to becoming a physician, and we find many of these vain pretenders going about bleeding, and administering medicines, from simple colored water to the powerful elaterium.* This state of things finds a support in the universal belief in specifics, which exists both among Mohammedans and Christians. Tradition informs us that Mohammed said: "There is a medicine for every pain; then, when the medicine reaches the pain, it is cured by the order of God;" consequently, the poorest and most illiterate vagabond may have a specific for certain cases, and the case to which he is called may be one of those to which his remedy is adapted. The injury which may result, should not such a fortunate coincidence occur, is not taken into the account. An effort was made by an intelligent man residing in Damascus, to remedy this state of things in that city. Having raised himself above the common level by a careful study of the modern Egyptian medical works, and acquired much from the visits of Clot Bey and other practitioners, he succeeded in organizing a Board of the most respectable physicians of Damascus, and obtained a decree from the then existing local authorities, that no man should be allowed to practice medicine in the city, without a certificate from that Board, thus excluding from the exercise of the profession all such as were not possessed of some acquaintance with either ancient, or modern authors. I have not learned whether this Board is still in existence, or not, or whether the decree of the local government has been renewed, or nullified.

As the practitioner seldom receives a fee for mere advice, it becomes his interest to do something in every case to which he may be called. Were the means usually employed of such a nature as to do no harm, in case no good resulted, this might be well enough; but in the great majority of ca-

* The *Momordica elaterium* abounds in nearly all parts of the country, and is usually given in the fresh state, and rather weak. The people are not in the habit of preparing the concentrated extract.

ses, blood-letting is the resort at all events ; and it is oftentimes repeated at each succeeding visit, until the patient dies, or gets well in spite of the efforts of his physician to kill him.* It is common, in cases of chronic disease, for the practitioner to make a contract with the patient for a certain sum, and, in case of failure in effecting a cure, to receive nothing ; but he generally manages to secure at least a part of the compensation in advance, upon pretence of purchasing medicines, or the like, so as to be sure of not coming off entirely empty-handed.

The theory of medicine in the East corresponds, in very nearly all points, with the old humoral pathology, its basis being the four humors, namely, blood, bile, phlegm, and black bile. To these must be added an all pervading agent denominated ريح *rih*, wind, to which a great variety of morbid affections are referred. It acts upon any part of the system, often removes suddenly from one organ to another, and is treated with stimulating remedies. Inflammatory and febrile affections are called نزل دم *nazal dam*, determination of blood, and are treated by blood-letting. A large majority of practitioners recognize only these two classes, that is, they make all diseases sthenic, or asthenic, and in practice are as good Brunonians as Brown himself could wish to see. But the difficulty is that they have no true idea of the nature of these two classes of disease, which in reality are not altogether without basis ; and consequently, the diagnosis between them must be very liable to error. So we often see a poor fellow, tossing about with griping flatulent pains in the bowels, bled to the extent of a pound or two,

*The following case occurred in Aleppo. A man came to the shop of a physician with a slightly inflamed eye ; after examining it, he sprinkled in a little eye-powder, took his pay, and directed the man to call again the day following ; he did so, and the operation was repeated, but the payment was forgotten. This happened several times, until one day the principal was absent from the shop, and the clerk, examining the eye, found in it a little piece of the beard of wheat, which he removed, and the cure was effected. Upon informing his master, he replied : "O fool ! do you suppose I did not know what was in his eye ; you have only made us lose our fee."

while one who can not bear the slightest pressure upon the abdomen is filled with cinnamon, nutmeg, cloves, and highly seasoned animal food. Phlegm is supposed to arise principally from the nature of the water habitually drank, and to it are attributed coughs and diarrheas. Bile occasions an infinite number of ailments of various sorts. Black bile is supposed to operate principally by causing low spirits, bad temper, and sometimes mental derangement, and must be treated by travelling, cheerful society and amusements. From the foregoing statements, ignorance of the circulation of the blood will be readily detected, and the fancies of the old humoralists recognized. Every individual has a more or less perfect idea of this system, which shows itself daily to one engaged in practice among the Arabs, especially in the examination of patients. It is often with the utmost difficulty that an account of the patient's feelings and symptoms can be obtained; instead of which, one is annoyed with his ideas and those of his friends, as to the nature of his complaints. One has a cold wind in his stomach; another, superabundance of bile; another, a great deal of black bile; another, phlegm; another, wind in the joints; another, a determination of blood to some part, and so on *ad infinitum*; and it is only by examining and cross-examining, with a severe trial to patience and good humor, that a satisfactory idea of the nature of the case can be obtained. Moreover, such is the disposition to exaggerate, that liberal discount must often be made, which can be done *ad libitum* when one has gained a little experience, and all statements require to be taken *cum grano salis*. It may be as well here, as elsewhere, to notice a fanciful complaint to which the Arabs are sub-

ject, called وثب *weththab*.* It is attended with uneasy sensations, especially a feeling of weight about the præcordia, and sometimes difficult respiration, a feeling of languor, and other symptoms of fatigue or of indigestion. The cause is supposed to be a swelling of the deep dorsal muscles, between

* From the root وثب to spring upon, to leap suddenly,—from the suddenness of its attacks.

the scapulæ, and a person is employed to grasp these muscles with the hand and squeeze them to the utmost of his power, which procedure is said to afford immediate relief. So firm is the belief in this, that no confidence is placed in any other remedy, and no arguments can dispel the prejudice.

Although all the physical agents in the production of health, or disease, are more or less taken into account, yet by far the greatest stress is laid upon water. In removing from one locality to another, nothing is more deprecated than a change of water. In recommending the salubrity of any situation, the highest encomium which can be bestowed is to pronounce its water good. Here, as in most other cases, the old adage that "every crow fancies its own young the whitest," is fully verified. No man can be induced to acknowledge that the water of his own village is not preferable to that of any other. To condemn a locality with an Arab, it needs only to be said that its water is bad ; but what qualities constitute good, and what bad water, is a question difficult to decide, prejudice, more than any thing else, determining opinions upon the subject. It is contended that the water of certain localities has a more powerful digestive quality than that of others, and it is said of several places, that if a man eats a stuffed sheep, and drinks of the water, the sensation of hunger very soon returns, as if he had eaten nothing ; and that no injury results from any over-loading of the stomach, all bad consequences being prevented by the digestive quality of the water. The ideas of the present Arab physicians, with regard to dietetics and hygiene, are a strange mixture of fancies and absurdities. Persons laboring under a febrile affection are scrupulously deprived of all cold drinks ; but animal broths, jellies, sweet-meats, walnuts, hazel-nuts, almonds, and such like articles, are freely allowed. Pomegranates and raw quinces* are considered as highly beneficial in such cases, and are eagerly sought after, insomuch that, in visiting a sick friend, no present is considered more in place

* Quinces are hawked about the streets with the following cry : طيب
عليك يا سمرجل i. e. Cure your sick one—Quinces !

than a few pomegranates. These would probably do no injury, were the seeds rejected, but to avoid swallowing them an Arab considers altogether a work of supererogation, which he is not bound to perform, especially in ill health; consequently, the stomach is filled with a most irritating, indigestible mass, and the symptoms are almost invariably aggravated. If the patient does not eat, it is supposed he must certainly die; and so, various stews, jellies, soups, and mixtures of animal and vegetable food, are prepared in order to induce a loathing stomach to receive something nourishing; while at the same time, unirritating articles of diet, such as sago, arrow-root, gruels, and other farinaceous preparations, are entirely unknown. The nearest approach to any thing of the kind is a preparation of starch boiled and sweetened with sugar, and also pounded rice boiled with milk; but these are perfectly despicable in Arab eyes, and are regarded as by no means sufficient to support the system under disease. Persons laboring under any affection of the lungs, attended with cough, whether fever be present or not, are directed to avoid carefully all acids, and acidulated food or drink. لبن *leben*, coagulated milk, is said to possess great refrigerant qualities, and is consequently unadapted to such constitutions as are liable to "wind" affections. دبس *dibs*, the juice of the

grape boiled to a syrup, is also considered cooling,—what fine cooling wine!—but honey is regarded as heating in the extreme. Wine and spirits, (arrack,) in small quantities, the latter just before and the former during meals, are considered as good promoters of digestion. Mohammedans of course discard both the wine and the spirits, but all classes unite in condemning the use of cold water until an hour or two after the food has been taken. The principle of abstinence from spirituous liquors is seldom reduced to practice, except by those who are more than ordinarily scrupulous in regard to their habits. The staple article of diet, and that upon which the main reliance is placed, is bread. Next to bread, the principal articles of food, in cities, are rice, and mutton with vegetables of various sorts, such as the بادنجان *badenjan*, a variety of the *Solanum melongena*, beans, let-

tuce, cabbage, beets, turnips, cauliflowers, small squashes, okra, onions, garlick, etc. The tomato, though growing abundantly in all parts of the country, has only within fifteen or twenty years come into general use, and that mostly through its use by the Franks. Potatoes have been cultivated for several years in the neighborhood of Ehden, and on the mountains above Tripoli; but the cultivation of them is now extending. More common is a species of arum, which, though very acrid, like all of its genus, in the raw state, yet when fully cooked makes a palatable and not unwholesome dish. The food of the peasantry, next to bread, consists almost wholly of olives, coagulated milk, and lentiles cooked with mutton fat, or oil, and mixed with a few chopped onions. In the interior, *برغول* *burghul*, wheat coarsely

ground, forms the staple article of food. It is cooked with mutton fat, or, in grazing districts, with butter. Meat is rarely tasted; and there is little variation from this coarse fare from one end of the year to the other. In many localities, rice is unknown except as an article of diet for the sick, and it is a common form of imprecation to say: "May your house never be clear of rice," meaning, may you always have sickness in your family, so as to render rice necessary as an article of diet. It may here be asked why rice was not mentioned above, in speaking of the food for the sick. The reason is that an Arab relishes rice only when cooked with fat, or butter, mixed with chopped meat and the seeds of the pine.

Even the above mentioned coarse fare is often beyond the reach of the abject poor, who subsist, much of the time, upon barley-bread, olives, and raw onions. As might be expected, such aliment gives rise to various affections of the digestive organs. The form of disease most frequently encountered is a most distressing and obstinate dyspepsia. The great uneasiness experienced after taking food, compels the sufferer to endure the gnawings of hunger as long as possible, and, when at last he can hold out no longer, the food is swallowed only to cause more intense suffering, until it is rejected. This state of things sometimes lasts for years, and sometimes terminates sooner in chronic inflammation, or ul-

ceration of the stomach. In other cases, where the irritation is seated in the duodenum, the gastralgia occurs some hours after eating, and continues until digestion is completed. Cases of the latter class are usually connected with hepatic derangement, and though not so urgent in their symptoms, or so speedy in their termination, as the former, are yet quite as obstinate, and usually proceed from bad to worse until the patient is worn out with suffering, or carried off by diarrhea. These cases, occurring generally among laborious, hard-working people, are perhaps the more unmanageable on that account. All remedial means employed upon them may be considered as thrown away, on account of the utter impossibility of restricting the patient to any thing like a simple, unirritating diet. Indeed, as has been remarked before, the Arabs know no such diet. Arab practitioners treat these diseases as "superabundance of bile," and follow them up with repeated drastic cathartics, or denominate them "wind," and exhibit stimulating, heating remedies; both of which courses, it is needless to add, only aggravate the disease.

To the prevailing use of uncooked food, animal and vegetable, may perhaps be attributed the great prevalence of worms among the Arabs. Be this the cause or not, it is a fact that scarcely one person in fifty is unaffected by some variety of these parasites, by far the most prevalent of which is the tape-worm. Aside from the annoyance they occasion, the presence of these worms often gives rise to anomalous symptoms, which frequently confuse the practitioner who has not been in the habit of meeting them; but after a little experience, a glance of the eye is usually sufficient to determine the cause of the difficulty. Very little reliance can be placed upon the statements of the patient; for, unless he has passed worms within two or three days, he will strenuously deny their presence, and is sometimes really ignorant of their existence. The Arab physicians are very deficient in their knowledge of the proper treatment of these complaints. The bark of the pomegranate root, soap, and some few other trifling articles, are all the remedies they use. Of the use of mercurial preparations, tin, oil of turpentine, and such like vermifuges, they are entirely ignorant.

A great majority of the present Arab physicians have not the slightest idea of the true anatomical structure of the human frame. Even those very few who have studied the descriptions of Avicenna, have no clear conception of the arrangement, or relative position, or functions of the different organs of the body. One of the most respectable physicians of Tripoli, a man tolerably well read in Arabic medical literature, maintained very strenuously that the liver occupied the left side of the abdominal cavity. Another, who was prescribing for a patient dying from ulceration of the bowels, declared the disease to be an "opening of the lungs." Another declared a case of bloody urine to be caused by "wind in the bladder." The pain in the back and loins which always accompanies fever, is often treated by a local abstraction of blood. Pain in the stomach is universally denominated "pain in the heart." *Cynanche tonsillaris* is supposed to be caused by the tonsils, called "daughters of the ears," falling down upon the pharynx, and relief is to be obtained by "lifting them up," which is done by gentle pressure upon the tonsillar region, accompanied by friction with the thumbs along the under margin of the jaw, over its angle, towards the ears. The only difference known between arteries and veins, is that the former pulsate and the latter do not. Hernia and hydrocele are denominated "wind of the scrotum," and hemorrhoids, "wind of the rectum." This entire ignorance of anatomy must continue as long as the present superstitious horror of mutilating the dead prevails. Autopsic examinations could not be obtained in one out of a thousand cases, and dissections are out of the question.

The most implicit reliance is placed upon the state of the pulse, as an indication of health or disease, and a knowledge of its varieties is supposed to enable a person to distinguish all morbid affections, without any inquiry into other symptoms. The patient comes to the physician, and holds out his hand; the pulse is felt in each wrist successively, and if by previous knowledge of his habits, or by catching some complaint which he may have dropped to the bystanders, the practitioner can make out the case within any reasonable degree of probability, he is content; if not, he draws out in a random conversation enough to enable him to prescribe upon some

sort of foundation, but at the same time conveying the idea that his whole dependence is upon the pulse, and his knowledge of the disease derived altogether from that source. So far is this confidence carried, that women in doubt as to their situation present themselves before a physician, that he may decide from the pulse whether they are pregnant, or otherwise, and whether the *fœtus* be a male, or a female; all of which the physician determines with the utmost gravity and assurance, and a thousand failures can not destroy the confidence built upon a single successful "guess." Neither is it by any means necessary that the physician should see his patient, before deciding upon his case and prescribing for it. It is amply sufficient, if the latter should send a verbal, or written message, naming his complaint, which it is taken for granted he knows, or describing some of the most prominent symptoms, since the pulse can not well be examined at a distance. Such a message calls forth an order for bleeding, purging, or whatever other treatment may suggest itself to the mind of the practitioner at the moment. One individual in particular, residing in a village near the foot of Mt. Lebanon, having acquired some celebrity, at present does little beside prescribing for patients at a distance, after this manner; and in nine cases out of ten, blood-letting and purging are the remedial means directed to be employed.

In many villages of Mt. Lebanon, the priest, who usually knows as much about medicine as a "green goose," acts in the capacity of physician. But some notorious cases of mismanagement having hence occurred, the lower clergy have latterly been forbidden by their superiors to meddle with physic, except so far as to draw blood, when no other person can be obtained to perform the operation, and this only upon the advice of a physician previously consulted by a verbal or written message. Credulity and a fondness for the miraculous still form as prominent traits in the Arab character, as in former times. The story of the king Yunan and the sage Duban, which is familiar to every reader of the *Thousand and one Nights*, is only akin to many others of a similar character still current in the East.

The confidence in charms and amulets, so implicit in former days, is not at all diminished in the present age. Fe-

males and children have usually a blue bead, or other ornament, suspended over the forehead, just at the parting of the hair, or a string of blue beads about the neck, in order to ward off the effects of the "evil eye." Horses, cows, and other animals, have frequently a blue bead, or a small piece of notched wood, suspended from the neck, and fruit trees and vines are often daubed with a streak of red or blue, for protection against the same evil influence. This is generally supposed to be exercised by old women, sometimes by others, and often unintentionally. If the beauty of a child, or of an animal is remarked upon, it is supposed that it is intended to give the "evil eye," unless at the same time the words: "in the name of God" are uttered, which act as a preventive against any detriment which might otherwise occur. Among other ridiculous notions of this kind, is the idea that the *patella*, or the *trachea* of a wolf will invariably cure the mumps, if suspended from the neck of the patient. As a means of evil influence, *ḥi khat*, writing, holds a conspicuous place, particularly among Mohammedans and Druzes. It is supposed that some individuals have the power of bringing disease upon others, by merely writing certain words upon a slip of paper. Maladies thus caused do not properly fall within the province of the physician; but he may pronounce whether a case be one of *khat*, or not. There is another class of practitioners, principally from the Barbary States, who pretend to have the power of releasing those so affected, by means of a counter-writing, which is to be worn by the patient under the head-dress, and which takes effect after a longer or shorter time. A great majority of all classes and ages, have usually some paper, or image, or relic, about the person, which confers many imaginary benefits; and during illness, various charms of this nature are employed both by patient and physician, in order to enhance the effect of the remedies used.

It is a principle strenuously inculcated by the Arab physicians, and implicitly received by all classes, that catarrhal affections and pulmonary complaints are highly contagious. No one will smoke from the same pipe, or drink from the same vessel, with one laboring under a cold, for fear of catch-

ing it ; and for the same reason cases of phthisis are avoided as much as is practicable, insomuch that the clothes and bedding of consumptives are destroyed, and the room in which one has died of this disease, is left unoccupied for a long time, lest the contagion should be communicated from the walls. Small-pox is supposed to be communicated merely by a glance of the eye, and consequently variolous cases are excluded from view as carefully as possible. Within a few years, confidence in vaccination has been greatly diminished by the fact that many vaccinated persons have latterly suffered from small-pox. But this is easily accounted for by another fact, namely, that the majority of those who have gone about the country vaccinating, have not been able to distinguish a genuine pustule from a spurious one, supposing that, the larger the sore chanced to be, the more effectual would be the vaccination ; while others, regardless of all principle, have, for the sake of gain, vaccinated many of the poor ignorant mountaineers, with the juice of the green fig, which, from its producing a large sore, has led numbers to think themselves safe from the disease, from which they afterwards suffered, and perhaps died.

Of the science of chemistry the Arabs are entirely ignorant. Although they are acquainted with a goodly number of substances belonging to the mineral kingdom, yet few of these, except the most common, are used in medicine. Sulphate of soda, sulphate of magnesia, borax, alumen, sulphur, salts of iron, and corrosive sublimate, are the principal articles of this class in general use ; but the great majority of remedies are drawn from the vegetable world. The Arabs understand by chemistry what we understand by alchemy,* namely, the art of converting the baser metals into gold and silver. They still hold to the theory of four elements : fire, air, earth, and water, and all the metals and precious stones are supposed to be cooked in the bowels of the earth, by a natural process, such as the combined influence of the sun, moon and stars. Gold being therefore accounted a compound substance, it is not deemed futile to search after its component elements, and

* Derived from الكيمياء .

the means of uniting them, or of converting other substances into gold. Notwithstanding all the unsuccessful efforts of the past, there are still those who are engaged in this fruitless search. Instances have recently occurred, in which persons have wasted large fortunes in gold-making experiments, and notwithstanding the failure of all, still continue firm in the belief that the thing is practicable, and attribute their ill success to ignorance, or to want of the necessary materials.

Of botany, as a science, quite as little is known as of chemistry. Although, as has been remarked, most of the articles of the *materia medica* are derived from the vegetable kingdom, yet plants are known only by names, not by descriptions, and, as names vary with localities, inextricable confusion arises from this source. It would be difficult to recognize any of the plants mentioned by Avicenna, merely from his descriptions, and different names are often given to the same thing in different places, or the same name is given to widely different things. From the almost total ignorance which prevails, in regard to all generic and specific distinctions, or similarities, every plant is considered as existing *per se*, and to bear no relation to others, except perhaps in the case of a few garden vegetables, or cultivated flowers. An Arab sees the widest difference, but no similarity, between the egg-plant, tomato and potato, and knows no difference between the red anemone and wild poppy.

Having previously alluded to the frequency with which abstraction of blood is employed by the present Arab physicians, it may be well to notice here some of the means used for the accomplishment of this. Venesection is by far the most common method, and the bend of the arm, or the back of the hand, is the part usually selected. The old idea of the peculiar connexion of the cephalic vein with the head, and of the basilic vein with the body, is still retained; and the selection of this, or that, for the operation, is determined by the seat of the disease. It is also common to draw blood from the feet, in diseases of the head and derangements of the menstrual secretion, upon the principle of revulsion. In cases of jaundice, one of the veins under the tongue is al-

ways selected. This latter disease is supposed to be recognizable only by a turgid state of the ranine veins, and their being slightly tinged with yellow. Those who have not the means of obtaining a good European lancet, use an iron one manufactured by any smith of ordinary dexterity, and cases are not unfrequent in which the operation is performed with a pen-knife, or even with a piece of glass, or a sharp flint. It is needless to add that these instruments are often broken in the flesh, and produce serious consequences. From the entire ignorance of anatomy which prevails, and to which allusion has been made, it is the custom in the case of fat persons, whose veins are small and not distinguishable by the eye, to feel for the artery at the bend of the arm, and dive down upon it; but as the vein usually crosses the artery at the point where the pulsations of the latter are most distinctly perceptible, it is pierced first, and the blood, gushing out by the sides of the lancet, informs the operator that he has gone deep enough. To one who is aware of the frequency with which all classes resort to this operation, for headaches, stomach-aches, colds, rheumatic pains, and the most trifling affections, it becomes a matter of surprise, not that accidents occur, but that they do not happen a thousand fold more often. Scarification with a razor is very common for all sorts of tumors, or swellings, whether inflammatory or œdematous. Cupping is also practiced, sometimes dry, and at other times after scarification, as above mentioned. The cups employed have contracted orifices, so that they necessarily become heated by the lighted taper employed to rarefy the air, and thus cauterize the patient as well as cup him. The use of leeches has become very common in cities, but they are rarely used in country villages and on the mountains, on account of the difficulty of obtaining them at the proper moment.

The actual cautery is resorted to not less frequently than blood-letting. It is performed with a common iron nail, or a piece of wire; or a piece of lighted spunk is laid upon the part, and suffered to burn out. It is sometimes found difficult to cause the cauterized part to suppurate, and the use of emollient poultices to accomplish this end is not known. The usual application is a green leaf, or a piece of paper, and a pea is inserted to keep the issue open, after it has

been established. Some itinerating oculists carry with them cauterizing irons of various forms, adapted to affections of the eye. As is the case with blood-letting, the cautery is resorted to for the most trifling complaints, and scarcely an individual can be found who has not a greater or less number of cicatrices from this cause. The common aphtha of children,

if at all severe, is denominated حبة الكبي *hubbet el-kai*, pimple of cauterization, and is supposed to be curable only by cauterizing the poor little creatures upon the crown of the head. The cautery is also thought to be the only cure in most cases of ulceration of the mouth and fauces in adults. To such an extent is this practice carried, that it is related of some poor simple-minded people that, finding their pumpkins decaying rather prematurely, they were told that a bad disease had got among them, which was to be cured by the cautery, and they actually heated an iron, and cauterized a pumpkin, in order to try the experiment.

Issues and setons are also in common use, but rather upon the principle of diverting morbid humors from important organs, than upon the principle of counter-irritation. Vesication by cantharides is practiced in a few parts of the country, and in others use is made of such plants as afford an acrid, irritating juice, but much antipathy to this class of remedies is everywhere apparent. Sinapisms are not known. Acupuncturation is often resorted to in affections of the joints, after blood-letting and the cautery have failed. This operation is performed by striking the part repeatedly with one or more needles, as is done in the tattooing of sailors. Wens, warts, swelled bursæ, etc. are also treated in the same manner. Enemata are common, and are usually made of a decoction of the althea, or malva. The place of a syringe, (which is usually found only in cities,) is supplied by a clyster bag, formed commonly of a goat-skin, with a small piece of reed in the place of a pipe. Suppositories of soap are often substituted for enemata; but for children they are usually made of a piece of brown paper firmly rolled into a conical form, and smeared with *dibs*.

The principal articles of domestic medicine are the flowers of the *Viola odorata*, chamomile, mallows, and the *Althea syriaca*.

Among the most valued articles of the Arab pharmacopeia may be reckoned the Bezoar stone, commonly called *hajar benzehr* (a corruption of *بازهر bazehr*.) The Bezoar stone is divided by the Arabs into three classes: artificial, mineral, and animal. The artificial is compounded by artificial means, and is always imported; the mineral is supposed to be found in the earth; the animal, to be furnished by various domestic or wild animals. The most esteemed is supposed to be a concretion of the tears of the wild ass, formed upon the cheek of the animal. This species bears a very high price, and is eagerly sought after. Tumors are occasionally found in that situation on the domestic ass, and are in great demand, though not so highly prized as those obtained from the wild animal. This remedy is administered in very small doses to epileptic and hysterical persons, and also in cases of acute disease, as a *dernier resort*, when recovery is all but hopeless, it being contended that, after the administration of this remedy, if the disease is to prove fatal, it will come to a speedy termination, or if not, will immediately assume a more favorable aspect.

Recent attempts to introduce modern remedies have succeeded in some instances, and failed in others. The sulphate of quinine for example, in consequence of its price, precludes the possibility of as much profit being made upon it, as upon other articles; and, notwithstanding its power in intermittents is well known, the physicians have succeeded in spreading the idea that it causes those affections which often appear as the sequelæ of long continued fever and ague, such as enlargement of the spleen, dropsy, and hepatic derangement. The main ground of this objection to it is, that its use is attended with less pecuniary emolument than bleeding and purging. In one village where, during certain seasons, intermittent fever prevailed to a great extent, bleeding and tincture of camphor were the remedies employed by a native physician.

The connection between barbers and surgeons, in the East, is not yet altogether dissolved, and those "most worshipful" gentry still bleed, leech, cauterize, draw teeth, and perform sundry other operations connected with the chirurgical art. The operation of extracting "disorderly" grinders is performed without any previous division of the gum, sometimes with a hawksbill, and sometimes with a straight forceps, which break the tooth quite as often as they extract it. Physicians, so called, confine themselves to the practice of medicine, but those who pass for surgeons act in either capacity, *pro re natá*. The Arabs have a superstitious dread of all surgical operations, especially such as mutilate the body, and often prefer death to undergoing them.

Malignant and masked intermittents occur occasionally, and under native treatment usually prove fatal, the paroxysmal character of such cases not being noticed, or if noticed, not being taken into account in determining the nature of the complaint. Cutaneous diseases, such as erysipelas, urticaria, scabies, and porrigo, are of frequent occurrence, and may be attributed mostly to want of cleanliness. Porrigo especially abounds in all parts of the country, and after baffling the profession is often cured by some old woman, who by dint of scarifying with a razor, pulling, and the use of the tar-cap, succeeds in extracting the bulbs of the hair, or exciting an inflammation in the parts, which results in a cure. The Aleppo button is well described in Tweedie's "Library of Practical Medicine." Soon after the expulsion of the Egyptians from Syria in 1840, a soldier who had been impressed from one of the villages of Lebanon, returned to his home from Aleppo, affected with the button. In a few months, others in the same village seemed to have taken it from that individual, and it spread to several surrounding places. The appearance of the sore was in all respects like that of the real Aleppine disease, but it differed from the latter in that it healed after a few months, instead of continuing a whole year.

Diseases of the eye, notwithstanding their frequency, are, if possible, more improperly treated than any other class of maladies. In ophthalmia, no regard is paid to the tissue af-

fect, but coarse, irritating powders are sprinkled upon the conjunctiva, whatever may be the stage of the disease, and without any previous depletion. Nearly every practitioner has a *kohl*, eye-powder, of his own; and few are the cases of severe inflammation in which the individual escapes without some specks upon the cornea; and very often deep ulceration, or incurable opacity, is the result. It is a common practice to apply the sulphuret of antimony, (the *kohl* of the Arabs with which they ornament their eyes,) to the roots of the eye-lashes, as often as once a week, from an idea that it conduces to clearness of sight, and women constantly use it as adding to their beauty. One cause of the frequency of ophthalmia in the East must be looked for in the universal custom of keeping the head wrapped up in woolen caps, turbans, and handkerchiefs, which must necessarily debilitate the parts, and render them exceedingly susceptible to morbid impressions. It is an undeniable fact that twenty cases of ophthalmia occur among the Arabs, to one among the Frank residents, after allowing for the greater proportion in number of the former; and yet both are equally exposed to the remote causes of the complaint. Among the females of Mt. Lebanon, the "horn" is a fruitful cause of ophthalmic diseases. This singular appendage, from its height and weight, needs almost as many forestays and backstays to keep it in position, as the mainmast of a seventy-four. It is worn night and day, being taken off only once every week or ten days, in order that the hair may be combed. Its weight always presses more upon one side than upon the other, and the greatest pressure is usually over one eye, which relaxes the palpebral muscles, and causes that eye to appear smaller than its fellow. Those who wear the horn are constantly complaining of headaches and colds, and are exceedingly liable to trichiasis, upon the slightest inflammatory action. One of the fastenings of this horn passes under the chin, and necessarily limits the motion of the jaw. A case occurred to the writer of a woman who could not open her mouth more than an eighth of an inch, and upon examination it was found that the band alluded to, where it pressed upon the lower jaw, just in front of its angle, had formed a groove in the bone, capable of containing the little

finger. After merely laying aside the horn for a few days, the woman could open her mouth more than an inch. Entropion is of very frequent occurrence in the male, and very rare in the female. Cases of entropion in the latter occasionally appear, and trichiasis occurs daily. Glaucoma is mistaken by the native physicians for cataract. All opacities of the lens are denominated "grey water," and there are a few professed oculists who are in the habit of couching with a plain, straight needle, after having cut through the sclerotica with a common lancet. It is needless to add that the humors often escape, and vision is lost.

Mention is sometimes made of an individual near Tripoli who performs the lateral operation for lithotomy, but with what instruments has not been ascertained.

Phlegmonous tumors are treated with stimulating, resinous ointments, which retard instead of promoting suppuration. Emollient poultices are considered as of little value, and, if used at all, are usually applied cold. Ulcers are also treated with resinous salves, and when these fail, resort is had to the most vile and irritating applications, such as gunpowder, coarsely powdered charcoal, and dung; and instead of being duly cleansed, they are scrupulously guarded from water. Most individuals have a great dread lest any one but a physician should see their sores, from a superstitious notion that the eye exerts an evil influence upon them. Pleasant odors are considered as highly injurious to patients affected with ulcers, and still more so in cases of fresh wounds, but disagreeable smells are accounted harmless; and so the patient goes about with an onion under his nose, lest an agreeable odor should accidentally meet his nostrils, and thereby injury to the sore be occasioned. Sinuous ulcers are plugged up with tents smeared with ointments of various kinds; and these are continued as long as any discharge takes place, it being supposed that the ulcer can not heal until there remains no more pus to be discharged. These tents are often so enlarged, and crammed into the cavity, as effectually to keep down granulation, thus defeating the very end intended to be accomplished. Injections of corrosive sublimate are occasionally employed, which often succeed by exciting inflammation and effusion of lymph, but the art of laying the

cavity open and allowing it to fill up from the bottom is entirely unknown.

Inguinal hernia is one of the most common affections of the East; femoral hernia is rarely found. The relaxing influence of the climate doubtless contributes somewhat to the frequency of this complaint, but the most fruitful cause of it must be looked for in the use of the girdle. This universal article of dress, worn in numerous folds around the body, is usually drawn so tight as greatly to compress the abdominal viscera, and force them to seek an outlet at the inguinal canal, as being the weakest part of the abdominal walls. Cases of incipient hernia, where the intestine had just passed the internal inguinal ring, have been checked by instructing the patient to relax his girdle, and avoid hard exercise. The Arab physicians call these affections "wind," and have no idea how the bowels can protrude from their natural situation without any external wound. The actual cautery is often applied to stop this descent of wind, and it would not be safe to say that this proceeding might not, by the contraction of the cicatrix, result in arresting incipient cases. Trusses are little known, and yield little benefit where they are known, because the patient can not be induced to wear them perseveringly; and, from the same cause, cases of congenital hernia are never cured. Hydrocele and swelled testicle are also denominated "wind;" the latter is often successfully treated by the actual cautery applied to the nape of the neck, just below the hair. How far does this circumstance go to prove the connection between the cerebellum and the genital organs? Lumbago is called, "wind of the kidneys," and hemorrhoids, "wind of the rectum." Some few individuals have the art of opening hemorrhoidal tumors, when seated externally, with a pair of scissors. Great detriment is feared from a suppression of the hemorrhoidal discharge, where it has been long established.

In the treatment of gun-shot wounds, little effort is made to extract foreign bodies, or detached pieces of bone; instead of which, great reliance is placed upon ointments which have the supposed faculty of "drawing," and whatever foreign substance may be present is left to come away with the discharge of pus. The actual cautery and compression are the

only means employed to suppress hemorrhage, the efficacy of ligatures, and their mode of application, not being understood. No precautions are taken to guard against secondary hemorrhage; and often, when the slough comes away, the patient dies from loss of blood, to the astonishment of surgeon and friends, who had supposed all danger from that source to be over, because blood did not flow from the first.

Concussions from falls, or from blows, are treated with blood-letting, without waiting for reaction. It is also common in such cases to wrap the patient in a warm sheep-skin, just stripped from the animal, lest the blood, becoming cold, should "settle" in the injured part. Besides this, wherever it is practicable, the patient is made to drink a decoction of the hand, or foot, or some other part, of one of the mummies brought from Egypt, and great reliance is placed on the efficacy of this vile stuff in preventing any unpleasant consequences. Fractures and dislocations are treated by a class of professed "bone-setters." Many times, these impostors succeed in convincing a person who has received a slight sprain, that it is a bad dislocation, and pull and tug thereat, in order to magnify their own skill in the eyes of the beholders, and get a larger fee from the patient. Old women have sometimes acquired great celebrity in this sort of practice, generally by reducing luxations which never occurred, or fractures which never happened. In cases of undisputed fracture, tight bandages are applied without waiting for the occurrence or subsidence of swelling, and no effort is made to secure any degree of counter-extension.

In regard to the leprosy, as at present existing in the East, it may be sufficient to remark that, besides the scaly eruption corresponding to the *bohak* of Moses, there are two other varieties, the one called جذام *jedham*, which corresponds to the *Lepra astrachanica* as described in Tweedie's "Medical Library," the other called قرطم *kurtum*, from a root signifying "to lop off," corresponding to the usual descriptions of *Lepra tuberculosa*. Persons laboring under any variety of this disease, are for the most part assembled at Damascus, where they live in a separate quarter, though they are not excluded from communication with others.

They are supported in part by charity, and in part by legacies to their community. There is also a collection of these miserable creatures in Jerusalem.

Insanity is generally attributed to Satanic possession, and no remedies are used for it, except confinement, exorcising, or a pilgrimage to the shrine of some saint. *Khat*, writing, alluded to previously, is supposed often to be a cause of mental derangement, and "counter-writing" is the only remedy relied upon.

Gonorrhea and syphilis are confounded by the generality of practitioners, and are treated alike. The syphilitic ulcer is treated with the vapor of cinnabar; and secondary syphilis, with a preparation of mercury, corrosive sublimate, carbonate of ammonia, and sulphur, sublimed together, and exhibited in the form of pills or powders.

This subject might be pursued almost indefinitely, nor would it be devoid of interest to go somewhat minutely over the Arab materia medica and pharmacopeia. But neither time, nor the limits of this paper, which has already exceeded its intended bounds, will allow of any farther prosecution of the subject.